

Abstract of the Disclosure

Disclosed is a communications network element that is capable of routing signaling messages and includes a dynamic routing key registration feature which allows Internet protocol (IP) nodes to automatically register /

5 de-register and subsequently direct traffic towards or away from themselves without the need for manual operator intervention. A signaling gateway routing node includes a self-registering data communication module (sDCM) that is adapted to receive and process dynamic routing key registration messages from associated IP nodes. Such dynamic routing key registration

10 messages may include information that is used to register a new routing key association with a TCP/IP connection, de-register an existing routing key association with the TCP/IP connection, or modify routing key information associated with the TCP/IP connection.